

INDIA: Setting the Record Straight

by Joshua Karliner
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A Conversation with Edward A. Munoz, former Managing Director of Union Carbide India, Limited.

This interview was conducted by Joshua Karliner, Executive Director of the San Francisco-based Transnational Resource & Action Center, in association with the Bhopal Action Resource Center of the Council on International and Public Affairs. It is available as a 30 minute video which includes footage of Bhopal. For a copy send \$15 (\$20 outside the US) including shipping and handling. Send checks (or international money orders) to CorpWatch, 1611 Telegraph Avenue, Suite 702, Oakland, CA 94612).

EM: Edward Munoz

JK: Joshua Karliner, Environment-Business Bureau

EM: My name is Edward Munoz, actually it is Edmardo Alejandro Munoz, but it is difficult to pronounce in English so I am Edward.

JK: If you could tell us a little bit about the time when you worked for Union Carbide; and what different jobs you had.

EM: I started in 1958. I was based in New York. I worked mostly in the Western Hemisphere. I was Regional Manager for the Western Hemisphere. I spend nine months in Mexico doing a agriculture chemical division. And after that I went back to 70 Park Avenue in New York and I work as a Project Development Manager for a couple of years. As a Project Development Manager I was in charge of studying the project with subsidiaries and determining whether they were viable or not and one of them was India and I found it viable. And management in general was very skeptical about India, so they said "well, you find it viable when you go there and you make it work". So that's how I ended up in India.

JK: When did you go to India?

EM: 1967. And I went as Manager of a new division there which was the Agriculture Products Division and I went for a year the most two, and I stayed nine...And when the Managing Director left I was put in his place so I end up being Managing Director for 10,000 employee company, a pretty large company, and made fourteen plants throughout India.

....After nine years in India, foreigners are subject to the tax law of India, so it was time for me to leave. I came to New York as President of the Agriculture Chemical Division.

JK: So, what was the idea behind having an Agriculture Chemicals Division in India?

EM: The first reason was a good public relations. At that time pesticides weren't the bad guys, I mean they were, you know; they were thinking in terms of increasing agriculture production and pesticides were considered an important part of that increase in production. And we were approached by the Government of India and were requested by the Plant Protection Advisor to come and develop the market to continue to develop the market and to build facilities to make the products in India. And then one day, we started working, we have all kinds of problems. The Government of India is not the easiest government to work with--so we decided that in order to promote chemicals and counter chemicals were to formulate them ourselves. I am getting to the formulation business but that was not an industry open to foreign companies so we couldn't get into that. And they give us a small permit and we put a plant in Bhopal, to, an experimental plant, they gives us a permit for 20 tons of pesticides which is a ridiculously low amount but we put a plant and started making some formulations there.

JK: What year was that?

EM: That was in 68, end of 68 even 69. In the meantime, all of a sudden, a gentleman from Bhopal came to see us. He said I have a permit that allows us from the Government of Madhya Pradesh to put a formulation plant, a large formulation plant, and I don't have the money to do it, but I would like to do it with you. I said, well, why not? Well, I mean, let's look at it, and I personally went to Bhopal and we reached an agreement and in six months we were building a large plant in Bhopal.

JK: Tell me about the actual process. Tell me about the process of building the Bhopal plant.

EM: Well, the people at Park Avenue they have, they are very aloof about it, I mean you know they--in Park Avenue what we have

is lawyers and MBAs, I mean you know--nobody knows anything about building plants or engineering or anything, and they allow the engineers to have free reign on what they do, I mean really. So engineers, the engineering department in Charleston is sort of Mafia very inbred group of buddies that are very jealous of their prerogatives and do the things the way they want and this scenario with the foreign companies have very little to say, as you know the foreign affiliates have very little to say. If they want South Charleston to build the plant they have to sort of accept the ways of choice and operate it. Operate it, I don't say I don't know if they operate the same way today, I hope not. At that time they have, they have their, they were pretty authoritarian.

JK: So what happened? What were some of discussions that occurred between Union Carbide India and the group in South Charleston regarding the construction of the Bhopal plant?

EM: The plant to begin with should have been for 2 million pounds not for 10 million pounds, you know. We believe our own propaganda. I mean, we were cornering the market you see, by asking for 10,000 tons. We knew that 10,000 tons was a--something far into the future-- wasn't realistic for the next five to ten years. But we knew that if we asked for 2 million pounds and then Beyer will ask for other 2 million pounds, and FMC will come and ask for--and then we have competition in the market, so we ask for 10 million pounds. You know, but the engineering department said, well, if we are supposed to build a 10 million pound plant, we are going to build a 10 million pound plant. Say what a minute--that's propaganda. That's what you have signed--that's all the papers we have--that's what the government has authorized--that's what the managing committee has authorized, so we are going to build it like that. I mean that kind of thing is a childish comedy of errors.

JK: And where does the MIC come into the whole thing?

EM: So the design engineering was done in South Charleston and part of design engineering is to specify a price of the storage units, if that's what you wanted to know, where you are leading. And part of the process is whether this could not be put immediately into storage or balancing storage where one process would flow into the next or whatever. And the decisions are made in South Charleston.

JK: So then South Charleston decided to have large storage tanks for MIC?

EM: Well, South Charleston decided that they were going to build a plant for 10,000 tons an equivalent carbonates, something sufficient to supply them as a means of 10,000 tons of carbarnates and came to be the MIC was going to be stored and used as needed. So the decision to store MIC was theirs.

JK: And what did you think about that?

EM: Well, I mean, I would the rest of the industry I think it was crazy. You know. MIC is very unstable chemical. It traumatizes without notice and with evolution of a lot of heat the traumatization can be very explosive nature which only can control only to a certain point and simply it is very dangerous product to store. I mean, I, me and a lot of other people including Beyer, a chemical company for instance or including an environmental people in France, equivalent of our environmental agency here--they think that you shouldn't store it.

JK: And you told this to the people in Charleston?

EM: Well, they knew it and they knew our position very well, very clearly, that we don't want to build an MIC storage tank. I must admit that one of our reasons was economical. We just didn't want to spend the money on a very large tank. We suspected that we more or less knew how to control the storage, but it was expensive and it was a potential danger and we preferred to have a plan that will consume the MIC that was created and if you have store small amounts of MIC will use 55 gallon drums and which if they go berserk they don't cause too much problem. It can be contained in a scrubber in the plant, the solution we have found for France the same, you know. But South Charleston engineers just loved the big tank, you know, and they build it. They build after I have left. I guess if I would have been there it would have been difficult to build it because I would have raised hell to annoy them.

JK: Why do you think they loved the big tank?

EM: Well, look, one part of the thing is that we did have a big tank in Charleston, so we need big tank in any where else. You know, what's good for Peoria is good for Bhopal and etc., etc. I mean why is, that would be one philosophy, the other is that an engineering department engineers the project manager, etc. Everybody's salary is based on the amount of money they spend.... the more money you have to spend, the more people you have reporting to you, etc., the bigger your salary. And part of that is that Charleston loves big projects. The bigger the better.

JK: And what about the safety considerations? What do they say about that?

EM: Well, they felt that they could control the MIC, that they knew all about it. That MIC if kept in a stainless steel tanks with a small allowance of phosgene and a that inhibit traumatization and if you can keep it cool enough--it was pretty safe to handle. And they mention the record of the South Charleston plant, where they didn't have any problem. They forget that South Charleston there was no choice but to build storage tanks because the main use of the phosgene of the MIC in South Charleston was merchant. Was to sell to FMC and DuPont and have they a plan that was at that time very unreliable and was more down than working. And when it was working was producing pretty well and at that time they had to store it to supply customer wanting x tons amount. So they did need that tank at that storage facility. In India there was no such reason. And that whether we know how to control it or not, we know how to store nitroglycerin too, but to put in an urban setting is a little, have little regard for the safety of the rest of the

people. What can happen will happen eventually and they were oblivious to that problem.

JK: What about the plant in France?

EM: Well, in France, the plant in France was built by Union Carbide India with Union Carbide India technology for carbamalatation and impregnation of a granules which certainly was a much better technology than Union Carbide Corporation.

JK: When was this built?

EM: I would say it was built before the Bhopal plant, after the Bhopal chemical plant but long before the MIC plant. It had to be in, ah, 74.

JK: And this plant used MIC as well?

EM: Oh yeah, uh-uh.

JK: And what was the discussion there, was it stored in large tanks?

EM: Well, the thing was that they wanted ship MIC and first in large containers, and second because the large containers, they were not permissioned to ship in large containers, and second in 55 gallons drums, but those 55 gallons drums were supposed to be transferred to a storage tank. Why? It is anybody's guess. But they wanted to build a storage tank. But the French Government they consulted with the Germans on that and there was a little bit a leak perhaps from the Carbide local people that they would much prefer to store it in drums and the French Government said no to any kind of storage other than a certain number of drums.

JK: For safety reasons?

EM: For safety reasons, yea.

JK: And what would you say that is the difference between what happened in France and what happened in India? Why did it happen differently in France?

EM: In France, nothing happened, in France. In India simply because the Indians they accepted our design criteria, they saw that we were building like that and that's the way it should be built and everything was fine.

JK: What about the guy that took your place at Union Carbide India?

EM: Well, he didn't know anything about it.

JK: Why not?

EM: Well, he was a Linde guy?. He was strictly a man from a liquified gas division of products, liquid air products, and he didn't know beans about chemistry or MIC or anything.

JK: Now, Union Carbide said that the accident was a "unique combination of unusual events."

EM: Yeah. Uh-uh.

JK: In short an aberration where normally "safety is a critical element in all of our operations."

EM: Oh, yea, I could agree with that. I could agree with what they say. Nothing exonerate the engineer for having brought the dynamite to the center of town. Dynamite doesn't explode normally.

JK: Given everything you knew about the way the plant was built, about this debate, how did you react when the accident happened? You had left Carbide by then, you were with another company. What was your reaction?

EM: Well, I mean, my reaction was that it was an enourmous tragedy, it was a shame that it happened, but we all did have a responsibility for, you know, for putting a bomb in the middle of a populated place.

JK: Yet, Union Carbide says that this unusual event, they continue to maintain that the unusual event is a result of sabotage.

EM: Well, it may be sabotage--sabotage is one of the things that happen. I mean it can happen in Bhopal--it can happen in Charleston. It's possible. I hear they sabotage theory is plausible, you know, I wouldn't write it off. But that doesn't exonerate the guy that built the tank.

JK: Care to explain that a little more?

EM: Well, I mean if you, if you do something that it is inherently dangerous and somebody does something foolish with it, still you are responsible for doing that was inherently dangerous. No?

JK: So now, let's go back to Institute--the plant at Institute. Currently the plant is the only plant in the United States and perhaps the only plant in the world that still stores MIC in bulk. In fact it appears that it has a capacity to store three times as much MIC than the Bhopal plant.

EM: Oh, yea.

JK: What do you think of that? That it is still like that?

EM: Well, I think it's crazy. I think it's crazy. I think if you have an accident like in Bhopal they are going to kill all the people. That's going to make Bhopal pale.

JK: Why?

EM: Well, I mean, here in a more populated area and there is only one thruway to escape. And the thruway will be full piled up cars with dead drivers pretty soon. You won't be able to go anywhere.

JK: Do you think what happened in Bhopal could happen in Institute?

EM: Sure. Sure. It would be an unusual event. But unusual events happen all the time.

JK: What do you think the lessons of Bhopal are?

EM: Don't store MIC. Don't store dangerous chemicals. Particularly if you have alternatives.

EM: I think Bhopal to me would have proven that storing MIC can be lethal proposition for a lot of people. That if that happens in Charleston it would be a real disaster. That we thought that we could control the conditions in Bhopal, or we wouldn't have built a tank and to assume that we can control the storage conditions in Charleston is very optimistic. They say, well, the tank is similar or the safety features are the same and in Bhopal the back-up exploded--well--I'd be extremely concerned.

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